

Appl. No. 10/629367

In the Claims:

Listing of all claims:

1 1. (Previously Amended) A stand alone power supply
2 comprising;
3 a primary mover mechanically coupled to a rotating
4 shaft;
5 a generator having a rotor mechanically coupled to
6 the shaft, and further having a stator magnetically
7 coupled to the rotor, whereby the generator provides a
8 generator output;
9 an inverter having an inverter input in electrical
10 communication with the generator output, wherein the
11 inverter inverts power from the inverter input to provide
12 an inverter output;
13 a controller coupled to the primary mover and having
14 a feedback input; and
15 a feedback circuit coupled to the inverter output
16 and the feedback input wherein a feedback signal
17 responsive to at least one inverter output operating
18 parameter is provided to the feedback input.

1 2. (Original) The power supply of claim 1 wherein
2 the primary mover includes a speed control and the controller
3 includes an output coupled to the speed control, wherein the
4 speed of the primary mover is controlled in response to the
5 feedback signal.

1 3. (Original) The power supply of claim 2 wherein
2 the speed control includes an idle/run selector for selecting
3 between an idle speed and a run speed in response to the
4 feedback signal.

Appl. No. 10/629367

1 4. (Original) The power supply of claim 1 wherein
2 the controller includes means for controlling at least one of
3 a throttle position, a fuel pump, an injection timer, a fuel
4 to air ratio, fuel consumption and ignition timing.

1 5. (Previously Amended) The power supply of claim
2 1 wherein the at least one operating parameter is an inverter
3 current.

1 6. (Previously Amended) The power supply of claim
2 1 wherein the at least one operating parameter is an inverter
3 voltage.

1 7. (Previously Amended) The power supply of claim
2 5 wherein the at least one operating parameter further
3 includes an inverter voltage.

1 8. (Original) The power supply of claim 7 wherein
2 the feedback circuit includes a multiplier, wherein the
3 multiplier multiplies signals representative of voltage and
4 current to obtain a signal representative of power, and
5 further wherein the feedback circuit includes an integrator to
6 integrate the signal representative of power.

1 9. (Original) The power supply of claim 2 further
2 including a rectifier that couples the inverter to the ac
3 output, and wherein the inverter includes at least one input
4 energy storage device that stores rectified energy and wherein
5 the controller causes the primary mover to increase speed when
6 the energy stored decreases past a threshold.

Appl. No. 10/629367

1 10. (Original) The power supply of claim 1 wherein
2 the operating parameter is a function of a ripple in the
3 output.

1 11. (Previously Amended) The power supply of claim
2 1 further including a rectifier coupled to the inverter output
3 to provide a dc inverter output.

1 12. (Original) The power supply of claim 1 wherein
2 the generator is a dc generator.

1 13. (Previously Amended) The power supply of claim
2 1 wherein the generator is an ac generator, and the inverter
3 includes an input rectifier.

1 14. (Previously Amended) A stand alone power supply
2 comprising;
3 a primary mover mechanically coupled to a rotating
4 shaft;
5 a generator having a rotor mechanically coupled to
6 the shaft, and further having a stator magnetically
7 coupled to the rotor, whereby the generator provides a
8 generator output;
9 an inverter having an inverter input in electrical
10 communication with the generator output, wherein the
11 inverter inverts power from the inverter input to provide
12 an inverter output;
13 control means, coupled to the primary mover and
14 having a feedback input, for controlling the primary
15 mover; and
16 feedback means, coupled to the inverter output and
17 the feedback input, for providing a feedback signal

Appl. No. 10/629367

18 responsive to at least one inverter output operating
19 parameter to the feedback input.

1 15. (Original) The power supply of claim 14 wherein
2 the primary mover speed control means for controlling the
3 primary mover's speed, and the control means includes an
4 output coupled to the speed control means, wherein the speed
5 of the primary mover is controlled in response to the feedback
6 signal.

1 16. (Original) The power supply of claim 15 wherein
2 the speed control means includes an idle/run selector means
3 for selecting between an idle speed and a run speed in
4 response to the feedback signal.

1 17. (Original) The power supply of claim 14 wherein
2 the control means includes means for controlling at least one
3 of a throttle position, a fuel pump, an injection timer, a
4 fuel to air ratio, fuel consumption and ignition timing.

1 18. (Previously Amended) The power supply of claim
2 14 wherein the at least one operating parameter is inverter
3 current.

1 19. (Previously Amended) The power supply of claim
2 14 wherein the at least one operating parameter is inverter
3 voltage.

20-39. (Cancelled.)

40. (Previously Added) The power supply of claim
18 wherein the at least one operating parameter further
includes inverter voltage.

Appl. No. 10/629367

1 41. (Previously Added) The power supply of claim
2 40 wherein the feedback means includes a multiplier means for
3 multiplying signals representative of voltage and current to
4 obtain a signal representative of power, and further wherein
5 the feedback means includes an integrator means for
6 integrating the signal representative of power.

1 42. (Previously Added) The power supply of claim
2 15 wherein the inverter includes at least one input energy
3 storage means for storing energy to be inverted by the
4 inverter, and wherein the control means further includes means
5 for increasing primary mover's speed when the energy stored
6 decreases past a threshold.

1 43. (Previously Added) The power supply of claim
2 14 wherein the operating parameter is a function of a ripple
3 in the output.

1 44. (Previously Added) The power supply of claim
2 14 further including a rectifier means coupled to the inverter
3 output for providing a dc inverter output.

1 45. (Previously Added) The power supply of claim
2 14 wherein the generator is a dc generator.

1 46. (Previously Added) The power supply of claim
2 14 wherein the generator is an ac dc generator and the
3 inverter includes a rectifier.

1 47. (Currently Amended) A method of providing
2 power comprising;

Appl. No. 10/629367

3 generating an electrical output with an engine and
4 generator;
5 inverting the electrical input to provide an ac
6 inverter output;
7 multiplying signals representative of the ac
8 inverter output voltage and current to obtain a signal
9 representative of power, and integrating the signal
10 representative of power, and providing a feedback
11 responsive thereto; and
12 controlling the engine using the feedback indicative
13 ~~of an inverter output operating parameter.~~

1 48. (Previously Added) The method of claim 47
2 wherein the engine speed is controlled in response to the
3 feedback.

1 49. (Currently Amended) The method of claim 48
2 wherein ~~the step of~~ controlling includes ~~the step of~~ selecting
3 between an idle speed and a run speed in response to the
4 feedback.

1 50. (Currently Amended) The method of claim 47
2 wherein ~~the step of~~ controlling includes controlling at least
3 one of a throttle position, a fuel pump, an injection timer, a
4 fuel to air ratio, fuel consumption and ignition timing.

51-54. (Cancelled.)

1 55. (Currently Amended) The method of claim 58
2 further including ~~the step of~~ storing energy after
3 rectification and wherein ~~the step of~~ controlling includes ~~the~~
4 ~~step of~~ increasing engine speed when the energy stored
5 decreases past a threshold.

Appl. No. 10/629367

1 56. (Cancelled.)

1 57. (Currently Amended) The method of claim 47
2 further including ~~the step of~~ rectifying the inverter output
3 to provide a dc inverter output.

1 58. (Currently Amended) The method of claim 47
2 wherein ~~the step of~~ generating includes ~~the step of~~ generating
3 a dc output.

1 59. (Currently Amended) The method of claim 47
2 wherein ~~the step of~~ generating includes ~~the step of~~ generating
3 an ac dc output and ~~the step of~~ inverting includes ~~the step of~~
4 rectifying.